Quiz 2

Instructions: Legibly complete each of the following on lined paper and submit on Gradescope. Collaboration and outside help (in any form) are forbidden.

1. Consider the matrix $M = \begin{bmatrix} 0 & 1 & 1 & 3 \\ 0 & -3 & -3 & 1 \\ 2 & -1 & -2 & 1 \\ -1 & -1 & -2 & 2 \end{bmatrix}$

   (a) Express M as a product of elementary matrices times RREF(M).

   (b) Compute the determinant of M.

   (c) Is M invertible? Why or why not?